

STEWARDSHIP

THE QUEST FOR A SUSTAINABLE LANDSCAPE

Ismawi bin Zen
Izawati Tukiman

IIUM PRESS
INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA



STEWARDSHIP

THE QUEST FOR A SUSTAINABLE LANDSCAPE

Edited by
ISMAWI ZEN
IZAWATI TUKIMAN



HUM Press

Published by:
IIUM Press
International Islamic University Malaysia

First Edition, 2011
©IIUM Press, IIUM

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without any prior written permission of the publisher.

Perpustakaan Negara Malaysia

Cataloguing-in-Publication Data

ISBN: 978-967-0225-66-1

Member of Majlis Penerbitan Ilmiah Malaysia – MAPIM
(Malaysian Scholarly Publishing Council)

Printed by :
IIUM PRINTING SDN. BHD.
No. 1, Jalan Industri Batu Caves 1/3
Taman Perindustrian Batu Caves
Batu Caves Centre Point
68100 Batu Caves
Selangor Darul Ehsan

CONTENT

Preface	x
---------	---

Chapter 1:	
FROM DILMUN TO PUTRAJAYA: A JOURNEY IN SEARCH OF PARADISE ON EARTH	1-54

Ismawi bin Zen

- 1.1 Introduction
- 1.2 Paradise as a Garden
- 1.3 Indigenous Gardens of The Malay World
- 1.4 Landscape and Development Planning in Malaysia
 - 1.4.1 The Colonial Heritage: Towns Planning and Development Control
 - 1.4.2 Bridging the Gap: Rural and Regional Development
 - 1.4.3 Industrialization and the Transformation of Urban Landscape
 - 1.4.4 Malaysian Landscape and New Urbanism
- 1.5 Landscape and the Malaysian Planning System
 - 1.5.1 The National Physical Plan
 - 1.5.2 The State Structure Plan
- 1.6 Conclusion: Way Forward

Chapter 2:	
PERSONAL BONDING WITH NATURE IN A CITY	55-70

Mazlina Mansor

- 2.1 Introduction
- 2.2 Theories on Human-Nature Bonding
- 2.3 Studies on Human-Nature Bonding
- 2.4 Nature Benefits and Residents' Bonding in a City
- 2.5 Conclusion

Chapter 3:

THINKING ABOUT ENVIRONMENT: URBAN MORPHOLOGY

AND MICROCLIMATE CONDITIONS

71-107

Aniza Abu Bakar

3.1 Introduction

3.2 Urban Heat Island (UHI)

3.3 Urban Microclimate of Tropical Regions

3.4 Urban Wind and Ventilation in Hot-Humid Cities

3.5 Malaysian Sky Condition

3.6 Urban Form – Canyon Height and Street Width (H/W)
Ratio and Aspect Ratio

3.7 Vegetation in Urban Setting

3.8 Water Elements in Urban Settings

3.9 Conclusion

Chapter 4:

ENVIRONMENTAL PARADOX: URBAN DRAINAGE ISSUES

108-126

Izawati Tukiman

4.1 Introduction

4.2 Drainage Issues in Urban Landscape

4.3 Focusing on Sustainable Landscape Directions

4.3.1 Reduction of Reliance on Water as the
Medium of Transport for Waste

4.3.2 Elimination of the Mixing of Industrial Wastewater
with Domestic Wastewater

4.3.3 Separation of Stormwater Runoff from Flows of
Polluted Water

4.4 Conclusion – It's Time to Act

Chapter 5:

VALUES OF RIVER TOWARDS SUSTAINABLE URBAN LANDSCAPE DEVELOPMENT

127-151

Mohd Ramzi Mohd Hussain

5.1 Introduction

5.2 Rivers and Approaches to Ecological Knowledge
and Urban Natural Resources Management

- 5.3 Rivers as an Urban Greenways Corridor and Green Patches
- 5.4 Rivers as an Urban Heritage Conservation
- 5.5 Rivers and Riverfront Development
- 5.6 Islamic Perspectives on Sustainable River Development
- 5.7 Conclusion

Chapter 6:

Neighbourhood Green Open Spaces:

Modelling the Quality Criteria

152-177

Nurhayati Abdul Malek

- 6.1 Introduction
 - 6.1.1 Issues in Quality Green Open Spaces Study
 - 6.1.2 Research Directions and Objectives
 - 6.1.3 Theoretical Framework for Developing Quality Neighbourhood Parks
 - 6.1.4 Proposed Path Model on Quality Neighbourhood Parks
- 6.2 Defining 'Quality Neighbourhood Park'
 - 6.2.1 Neighbourhood Parks as Community Integration Venues
- 6.3 Method - Structural Equation Modelling (SEM)
- 6.4 Findings derived from the Path Analysis Model
- 6.5 Conclusion

Chapter 7:

HIGHLAND CLOSE UP: LINKING HIGHLAND LANDSCAPE TO MANAGEMENT PRACTICES 178-205

Jamilah Othman

- 7.1 Introduction
- 7.2 Implication of Excessive Development
- 7.3 Scenic Beauty Under Attack
- 7.4 Theoretical Assessment of Scenic Beauty Preference
- 7.5 Implications of Scenic Beauty Assessment

7.6 Conclusion

...

Chapter 8:

**EXPANSION OF MASJIDAL HARAM,
MAKKAH AL-MUKARRAMAH: TRANSLATING
CUSTODIANSHIP
INTO ENVIRONMENTAL STEWARDSHIP 206-251**
Ismawi bin Zen

8.1 Background: Masjid al-Haram and the Performance of *Hajj*

8.2 Kaabah and the *Hajj*

8.3 Visioning the Expansion of the Haram

8.3.1 Increase in Number of Pilgrims

8.3.2 Custodianship of al-Haram

8.3.3 The Moment

8.3.4 The Context

8.4 Problematiques and Challenges

8.4.1 Encroachment and Integration

8.4.2 High Values and Aggressive Development

8.4.3 Seasonal Peaks

8.4.4 Formal Configuration of the Haram Mosque

8.4.5 Excessive Stylization

8.5 Issues

8.5.1 The Issues of Scalability needs to be addressed
on a number of levels

8.5.2 *Khilafah* vs. Ownership

8.5.3 Materiality

8.5.4 Spirituality

8.6 Conclusion: Where do we go from here?

8.6.1 Plausible Solution

8.6.2 Total Solution

Chapter 9:

**PRE-EMPTING THE FUTURE: TRAINING OF A
LANDSCAPE ARCHITECT AT THE INTERNATIONAL
ISLAMIC UNIVERSITY MALAYSIA 252-279**
Ismawi bin Zen

9.1	Introduction	
9.2	The Training of Landscape Architects at the International Islamic University Malaysia (IIUM)	
9.3	The Making of a Landscape Architect	
9.3.1	Knowledge	
9.3.2	Creativity	
9.3.3	Skill	
9.3.4	Awareness	
9.3.5	Adaptability	
9.4	Step-Ladder of Quality in Knowledge Acquisition for a Landscape Architect	
9.4.1	Knowledge Delivery Model	
9.4.2	Knowledge Discovery Model	
9.4.3	Knowledge Construction Model	
9.4.4	Knowledge Innovation and Diffusion Model	
9.5	Conclusion	

BIBLIOGRAPHY	280
GLOSSARY	314

CHAPTER 8

EXPANSION OF MASJIDAL HARAM MAKKAH AL-MUKARRAMAH: TRANSLATING CUSTODIANSHIP INTO ENVIRONMENTAL STEWARDSHIP

Ismawi bin Zen

8.1 BACKGROUND: MASJIDAL HARAM AND THE PERFORMANCE OF *HAJJ*

Makkah is a city founded in the most arid of locations on earth. It was said that when Sayyidina Ibrahim a.s. was ordered by Allah s.w.t. to leave his second wife, Hajjar and his son, Ismail a.s. at the spot, there was not even a plant, not even a blade of grass, that grew in the area. The soil was rocky, specifically of volcanic rocks. It was, however, the meeting point of at least four dry channels or *wadis* made up from juxtaposition of low rocky granitic and basalt hills (Fig. 8.1).